

## USEPA AMCO Superfund Site CAG Meeting, June 13, 2011

### Attendees:

**EPA:** Rose Marie Caraway  
Leana Rosetti  
Lynn Suer

**EPA Contractors:** Kent Baugh/ITSI  
Yash Nyznyk/CDM  
Carolyn Moore/CDM  
Jack Medina (ilInterpret)  
Vic Johnson  
Maggie O'Donnell

**CAG Members:** Bradley Angel (GreenAction)  
Tanya Ferreira (GreenAction)  
John Schweizer (Technical Adviser)  
Brian Beveridge  
Eric Maundu  
Kerri Atwood  
Frances Watson  
Ellen Parkinson  
Jackie Ho  
CB Smith-Dahl

### Purpose of Meeting

- *Update community on status of Interim Proposed Plan*
- *Identify challenges to moving the Interim Proposed Plan forward*
- *Understand the competing perspectives and comments from other government stakeholders and community's technical advisor regarding how to address these challenges*
- *Discuss impact of comments on community concerns*
- *Discuss next steps by CAG to support community's interests*

### Welcome & Introductions

**Brian Beveridge, Community Co-Chair, and Leana Rosetti, EPA Community Involvement Coordinator (CIC) and EPA Co-Chair**

- Co-Chair Brian Beveridge and EPA Co-Chair Leana Rosetti welcomed the community
- Ms. Rosetti related that the Interim Proposed Plan has been reviewed by the EPA National Remedy Review Board (RRB). Ms. Rosetti indicated that this was a discussion item during today's CAG meeting. Input from the RRB included the need for additional characterization of contamination at the Site before receiving funding to proceed with remedial design and remedial action.
- Ms. Caraway will discuss the RRB meeting in more detail. It was requested that the CAG hold questions until the end of the presentation.
- Mr. Angel requested that EPA explain DTSC's role in the process for remediation of the AMCO Site.

- CB Smith, a West Oakland resident, does some reporting for Oaklandlocal.com. She is writing a series of articles about pollution in West Oakland and asked permission to videotape the CAG meeting. Ms. Smith also introduced her assistant, who was holding the camera.
- Mr. Beveridge asked if the videotape will be posted online or if the recording was only to be used as reference. Ms. Smith replied that clips may be posted online and the recording will be used as reference for an article. Mr. Beveridge stated that if any community member does not want their comment to be posted online, they should preface their comments with “off the record”.

## **Update on Status of Federal Funding for Superfund Sites Beginning Construction**

***EPA Remedial Project Manager Rosemarie Caraway***

### **Acronyms:**

**bgs = Below ground surface**

**DTSC = California Department of Toxic Substances and Control**

**FFS = Focused Feasibility Study**

**RRB = National Remedy Review Board**

**ROD = Record of Decision**

- Ms. Caraway indicated that she will try to answer Mr. Angel’s question as part of her presentation.
- Ms. Caraway indicated that at the AMCO Site EPA had completed a Focused Feasibility Study (FFS), with the focus for the interim remedial action involving soil excavation, primarily in the source area, and off-site disposal of the contaminated soil.
- Ms. Caraway indicated that there were differences in the construction cost estimates for the proposed interim remedies. Of the proposed interim remedies that were under consideration, one had an estimated cost of approximately \$43 million and the other had an estimated cost of approximately \$59 million.
- Before the meeting with the RRB, EPA presented the FFS and Proposed Plan to the California Department of Toxic Substances Control (DTSC). Because DTSC is responsible for paying 10% of the costs of remediation of this site under Superfund policy, it was appropriate that they have an opportunity to provide input on the approach proposed for site remediation. After this meeting, DTSC provided EPA with a Memorandum regarding DTSC’s concerns with the proposed remedy. Ms. Barbara Cook, Acting Assistant Deputy Director of the DTSC’s Brownfields and Environmental Restoration Program, was also present at the RRB presentation.
- Ms. Caraway described the RRB meetings. She indicated that RRB meetings take place at various locations across the country, and typically occur prior to making remedial action planning decisions available to the public for comment, if the proposed remedy has a cost value higher than \$25 million.
- Ms. Caraway directed the CAG to the DTSC Memorandum handout. Ms. Caraway pointed out that, consistent with input from the RRB, DTSC review board was very concerned about the high estimated cost of the remediation, due largely to the proposed excavation and disposal of toxic waste. The RRB asked whether there were other technologies that should be considered for implementation, or any new technologies in development that could be applied to the AMCO Site.
- The RRB’s number one concern was the limited dataset for estimating the extent of contamination. The current dataset is generally based on soil sampling to a depth of 5 to 6 feet below ground surface (bgs) and limited sampling of soil when new groundwater wells were installed over the past couple of years. The RRB requested that the EPA team collect additional soil and groundwater data.
- The Technical Advisor (TA) stated that it was his opinion that the remedy could be implemented at a lower cost by rearranging the steps contemplated for the proposed plan, including thermal and biological treatment. EPA responded that there are outstanding issues (e.g., buried drums) that could complicate an in-situ remedy. One of the objectives of the excavation remedy was to gather information to address the issue of the potential presence of drums and underground utilities. John Schweizer responded that there has been no evidence of drums being buried at the site in the more

than 25 years of investigations of the site, during numerous excavations in the central area of the site including underground tank removals, in the RI report, or subsequent groundwater monitoring. The groundwater monitoring data and soil sampling data have always shown that there is a distinct source area in the center of the site, and a secondary source under the sidewalk south of the site. The operational history of the site presented in the RI gives no reason to suspect drums having been buried there.

- EPA pointed out that the removal reports indicated the possibility of an underground storage tank that was never found.
- Ms. Caraway indicated that the costs for moving forward on Superfund projects are being scrutinized at all locations across the country.
- It has long been recognized by EPA that further soil sampling at depths greater than 25 feet bgs would be performed as part of the Remedial Design efforts. Based on input from the RRB, the additional characterization efforts would occur prior to the approval of the remedy and filing of the Record of Decision (ROD). There is a possibility that the results of the sampling will indicate that the impacts at the AMCO Site are less significant than EPA has assumed, thereby lowering the cost of the proposed cleanup.
- As part of the additional investigations, EPA will attempt to use ground penetrating radar and other non-intrusive measures to further characterize the sub-surface. Ground penetrating radar has had limited effectiveness in the presence of reinforced concrete overlying the ground surface. Mr. Schweizer pointed out that the concrete that covers most of the site is un-reinforced concrete.
- EPA believes that even if an in-situ remedial technology is implemented, there are some site constituents, such as pesticides, that will still require excavation. *(In a subsequent discussion with Ms. Caraway, Mr Schweizer expressed the viewpoint that, although AMCO is believed to have produced pesticides, the RI data indicate that pesticide concentrations and distribution in the near-surface soil close to the residences, vacant lots, and other unpaved areas, and not near the source areas, are consistent with residential use, not spillage during manufacture.) Mr Schweizer suggested that to reduce cost, stabilization of pesticide residues should be done along with lead stabilization of near-surface soil as a final step in the remediation process, if indeed any pesticide residues remain after thermal treatment.)*
- Ms. Rosetti asked whether that is because you can't treat pesticides using thermal treatment.
- Ms. Caraway indicated that sometimes thermal treatment can be used to treat pesticide contamination in soil if the temperatures are high enough; however, it is more difficult to accomplish this remediation, especially at the AMCO site in consideration of the shallow depth to groundwater.
- Ms. Caraway related that in addition to further site characterization efforts, the RRB requested that she go to EPA's national lab to evaluate the use of new technologies. The goal of the additional characterization efforts is ultimately to decrease the overall cost of site remediation.
- Scope of work and budgets will need to be developed for implementation of the additional site characterization. The investigation efforts will likely include sampling a lateral grid with a spacing interval of 20 by 20 feet, and vertically sampling down to a depth of 70 feet bgs. Approximately 125 borings are currently estimated for the site characterization. EPA wants to define the lower bound (bottom) of the impacted area. The working assumption is that contamination is not present to a depth of 95 feet depth, but defining the lower boundary will be important in developing and evaluating potential remedial actions. Mr. Schweizer pointed out that results of recent direct-push sampling and testing south of the site to a depth of about 130 feet is consistent with contamination in the Alameda formation below 100 feet from an upgradient source, most likely the AMCO site. These data are consistent with spillage of chlorinated solvents that occurred at AMCO, and subsequent migration in the deep groundwater.
- Community member David Carter related that he remembered that about 7 or 8 years ago when remedial actions at the site had been initiated, the TA had advocated for digging deeper wells. Who is responsible for not taking that advice? The community member indicated frustration that the TA's advice was not heeded.
- Ms. Caraway communicated that with changes in the source of funding for Superfund (e.g., chemical manufacturers no longer contribute taxes into the fund), EPA had to revisit how site cleanups were

funded. There are many sites that require funding for implementation of a remedial action and so the estimated cost of the remedy is being scrutinized. With the additional investigation efforts, EPA will have a much better sense of the overall cost of site remediation. The additional characterization activities will be implemented prior to preparation of the ROD. This results in a delay in the ROD by about 1 to 2 years.

- Mr. Angel indicated that he appreciated the EPA comments indicating that EPA was getting ready to start really moving forward after all these years.
- Ms. Caraway indicated that the goal is to complete the additional soil and groundwater characterization and develop a site-wide remedy within the next 2 years. The remedy will need to once again be reviewed by the RRB.
- Mr. Angel stated that he had heard from DTSC that the RRB believed that the site was not fully characterized. He noted that this was in contrast to earlier EPA claims that the site was sufficiently characterized. He feels that this calls into question EPA's claim that the site is safe to children and community members.
- Ms. Caraway responded that (1) the concrete capping at the Site limits human exposure, and (2) EPA had plans to perform additional investigation during the remedial design phase.
- Mr. Angel stated that there was no liner over the playground downgradient of the site. He wants to be able to support EPA in their upcoming efforts at site characterization, but wants to make sure EPA continues to monitor the safety of children using the park.
- Mr. Beveridge asked that in light of the change in schedule and the creeping nature of this pollution, were there any plans for continued soil gas testing in the park and the houses adjacent to the Site.
- Ms. Caraway responded that the last indoor air sampling was performed during the Fall of 2010. EPA can perform additional indoor air sampling to make sure that the levels of chemicals are still protective of human health, and do another round of soil gas sampling at the park. The homes that appeared to be impacted by vapor intrusion have vapor mitigation systems in-place. Ms. Caraway understood the frustrations on the part of the community regarding the delay in remedial action.
- The FFS was prepared based on conservative assumptions regarding the distribution of contamination in soils and groundwater.
- Ms. Caraway indicated that another cost driver for the overall remediation was the preliminary classification by EPA for the contaminated soil as "Listed Waste", which results in a stringent treatment requirement for all waste removed from the Site. The cost for excavation increased significantly as a consequence of this preliminary classification of the contaminated soil with off-site disposal.
- Ms. Rosetti suggested that there may not be that much net delay because the additional soil investigation activities were part of the remediation planned by EPA—it just would have been done after the ROD was in place. By doing it ahead of time, there may be a negligible delay in actual cleanup time.
- Ms. Rosetti added that it was possible that with completion of the additional soil characterization efforts, a site-wide *final* ROD may be prepared instead of an interim ROD.
- In response to a question from Mr. Beveridge regarding remedial action costs, Ms. Caraway stated that the overall cost includes the cost to implement the remedy as well as ongoing costs for operation of any installed system.
- The additional soil characterization efforts are expected to begin at the end of the summer. Samples for the biotreatability study will be collected as part of the soil characterization efforts. Each of the 2 elements of the treatability study is expected to take up to 6 months, resulting in a total estimated time of 12 months for the treatability study.
- If EPA concludes that there are no drums (based on the groundwater penetrating radar investigation), then design and implementation of a remedy will be less complicated.
- A community member suggested that we really need to wait for 6 months to a year before we can decide about remedy implementation. Ms. Caraway agreed and indicated that EPA will be evaluating new technologies that could lead to a less intrusive remedial action. It is possible that with identification of new technologies, less excavation will be needed.

- Mr. Beveridge asked whether the time frame for cleanup of AMCO was similar to other Superfund sites. Ms. Caraway stated that the duration of remediation is site-specific (e.g., the number of years to a remedy varies widely based on the conditions encountered). Ms. Suer indicated that there is an average duration for site remediation, but did not have that information readily available. It was questioned whether the average number would be a meaningful number because of the inherent variability in contamination, size, and conditions at Superfund sites.
- Ms. Rosetti noted that although the AMCO site was discovered in 1987, it was not listed until 2003 (with 2003 considered the start of the remedial investigation). The work done before 2003 was under the Emergency response program, which is a separate program within EPA.
- Mr. Beveridge noted that the AMCO site work has been ongoing for a long time. Is there some way to raise the profile of the site (higher priority)? Ms. Suer indicated that site prioritization is influenced by completion of the investigation activities. With the additional soil characterization, we will have completed investigation activities.
- Mr. Angel was troubled to see that DTSC was involved. He noticed that B. Cook, DTSC, questioned whether the site needs to be cleaned up to residential standards, which Mr. Angel believes would be disastrous.
- Ms. Caraway stated that as the EPA RPM, she remains an advocate for the residential standard. Ms. Suer noted that DTSC wants to be provided with the data and feels clean up to current land use is appropriate, and they also believe that cleaning to residential standards will be incrementally more costly.
- Mr. Beveridge asked Mr. Schweizer to comment. Mr. Schweizer believes that except for the deep groundwater, the site has been sufficiently characterized by the RI Report prepared by CH2M Hill. He believes the Proposed Plan was rejected by the RRB because it is too expensive, and that the cost of remediation can be greatly reduced by a step-wise implementation of the processes in the Proposed Plan in a different order. Mr. Schweizer brought posters to illustrate his suggestion. Mr. Schweizer suggested that after ground-penetrating radar, magnetometer testing and any other non-destructive testing are done, that the first step should be to do soil vapor extraction (SVE) with the system that will be needed to collect vapors during thermal treatment. This will not only reduce cost, it will allow expenditures to be spread out, rather than front-loaded as is the case with the excavation proposed by the Proposed Plan.
- Mr. Beveridge did indicate some concern about unanswerable uncertainties. Was EPA comfortable that this expanded characterization will make it possible to complete the remedy?
- Mr. Schweizer believes that the surface of the site has been well characterized; however, he does not believe that the deep groundwater has been well characterized. During the last boring investigation near the freeway, the shallow groundwater had low detections but at a depth of about 130 feet, there were indications that deep groundwater was impacted with VOCs. He believes that this is incentive for remediation of the source area as soon as possible.
- Ms. Caraway indicated that the planned depth for the soil characterization is about 70 feet which is the top of the aquitard that is supposed to precluding the contamination from going deeper. However, if the samples show that this area is contaminated EPA will determine the final depths of contamination. Ms. Caraway indicated that the initial thought was to go down to a depth of 95 feet, but if we find contamination at 95 feet, we will go deeper. *(Note: Mr. Schweizer's comments on the RI Report point out that there is a zone of high hydraulic conductivity where borings were terminated during the RI. Hydrogeological conditions should be taken into account in determining the depth to which boring should be done, not just whether there is contamination or not.)*
- In response to a question from Ms. Rosetti, Mr. Schweizer indicated that further characterization of the deeper portion of the site was indeed needed. However he felt that addressing the deeper groundwater was a waste of money unless the source area is remediated first.
- In response to a question from Mr. Beveridge, Ms. Caraway stated that further characterization is needed before implementing any remedies at the site. If deep groundwater impacts are identified, we could continue to sample while proposing an interim remedy for the source area. Ms. Caraway noted that a ROD had to be in place before remedial action could be initiated. An interim remedy is still a possibility, or we could move forward with the final remedy.

- Ms. Caraway indicated that Mr. Schweizer's comments were provided to the RRB.
- Mr. Carter observed that Mr. Schweizer was suggesting that the site has been sufficiently characterized for now. A community member was curious with regard to how his perspective is being considered. Is anyone listening to that perspective?
- Ms. Caraway stated that his opinion is considered. Nevertheless, there is broad agreement that additional characterization is needed.
- Ms. Rosetti noted that EPA met with Mr. Schweizer at length several months ago to talk out his ideas. There continued to be disagreement about a number of issues (e.g., possible presence of subsurface drums that could impact the safety and effectiveness of remedial actions suggested by Mr. Schweizer). The additional investigation efforts may clarify these conditions. Mr. Schweizer maintained that he did not believe that additional investigation was warranted.
- Ms. Caraway stated that information gathered as part of enforcement actions cannot be shared with the public (during ongoing enforcement investigations), including the community's technical advisor. Nevertheless, decisions must still be made taking into consideration that information. Despite this legally required restriction of information, on this project, Ms. Caraway is sharing more about the developing conceptual ideas than she has done in the past 22 years. Usually, the first meeting is the announcing of the results of the RI. The next meeting typically involves announcing the Proposed Plan regarding site remediation.
- Mr. Schweizer noted that the RI was completed in 2008, and that it was a very thorough investigation, taking into account all of the information about the site (documentation of removal of 2 USTs; documentation of soil excavation from the center of the site; documentation of removal of USTs from the site). He does not believe that it is advisable to spend more money and time to collect the additional shallow soils information and that doing so will not contribute to the understanding of the site. He continued to advocate a step-wise approach and the installation of soil vapor extraction to get started.
- Mr. Beveridge stated that as a member of the CAG and hearing this disagreement, he does not know what to do. What can the CAG do besides sitting here as observers? Is there still flexibility on how we move forward? Has the final further direction been provided by the RRB?
- Mr. Schweizer cannot think of a specific action that the CAG can take at this point. In a larger sense, he does not want to do anything that contributes to a delay.
- Ms. Suer indicated that there is some flexibility on the part of EPA. EPA would be very interested in finding an interim action that could be taken prior to fully characterizing the site. DTSC is in support of implementing an interim Dual Phase Extraction system. Alternatively, the EPA Office of Research and Development could try out a new technology at the site. The issue is whether it would be cost effective to implement such systems now or whether it would be better completing a detailed characterization, followed by (for example) excavation and Dual Phase Extraction.
- Mr. Beveridge indicated that it was helpful to hear that there is a next step. He did not see the benefit of have the CAG meet while EPA is involved in the additional characterization activities (drilling of 125 borings). Once complete, this would give the CAG something to discuss and provide input on.
- David Carter asked whether there was any avenue for the community to express that time is a real concern? Hearing that there is more delay means more problems and higher cost.
- Ms. Caraway stated that this meeting is for the community. She is invited here to present to the community. The CAG is free to do whatever they would like with their meetings and take whatever actions they feel appropriate.
- Mr. Carter suggested that Mr. Schweizer write an email about his concerns so that the community could better understand the issues at hand.
- Mr. Beveridge thought that the CAG could write a letter to EPA as a community, without it being mediated by the EPA project team. Everyone wants the same thing -- to see the cleanup happen as soon and effectively as possible. We are competing with communities all over the country for a fixed pool of money. We may need to make our voice known in ways that EPA staff is not able to.
- Mr. Angel agreed that a letter from the community could raise concerns about the delay. It has taken 14 years and the community is concerned about the snail's pace. This community should not be set

against other communities. Signatures could be collected in the neighborhood. The CAG could raise issues such as the delay in the implementation of remedial action or the concern about the DTSC proposal to not clean up to residential standards. These concerns could be taken to the higher levels of the EPA.

- Mr. Beveridge believes that the CAG has a good relationship with the EPA – i.e., the CAG definitely does not find themselves at odds with the EPA's interests.
- Ms. Caraway believes that we have all come a long way in two years. The CAG is contributing to this progress.
- Ms. Rosetti emphasized that all the posters on display at the meeting were prepared by Mr. Schweizer. He also prepared the CAG website, which is not only for the West Oakland Lead but it's for the AMCO site, as well. These could serve as a forum for sharing information and concerns. There are two websites:  
<http://epaportal.chemicalsafety.com/>  
and the one that Mr. Schweizer has worked on that belongs to the CAG:  
[www.southprescottcommunityforum.org](http://www.southprescottcommunityforum.org)
- Mr. Beveridge brought up an issue from a previous meeting. Last fall, after much discussion, the U.S. Army Corps of Engineers came to town and evaluated costs for houses. He would like to know the update on this. Ms. Caraway said that those cost estimates were included in the FFS. Relocation was going to be a part of the Interim ROD. That contract is still in place and relocation will still be considered as part of the next proposed remedy, if supported. The proposal was to permanently relocate folks living on 3rd Street and temporarily relocate folks living on Center Street.
- Mr. Beveridge indicated that the CAG could have suggestions for moving forward; suggestions for potential interim actions.
- Ms. Caraway indicated that EPA will definitely perform additional characterization activities. This will be followed by looking at interim measures, if appropriate.
- Mr. Beveridge asked whether EPA would have feedback from EPA Office of Research and Development by August that could be shared at an August CAG meeting.
- Ms. Caraway thought that we may have feedback from EPA ORD in September; however, data from the additional characterization would not be available.
- Mr. Beveridge asked how people felt about an update in September. There will still be Open Houses at the field office about the Lead Cleanup. In the meantime, the CAG can put together a letter and figure out whom to send it to so as to express CAG concerns about the delay in implementing remedial action and the cleanup standards for the site. We could have a community meeting or we could work it out via email or telephone;
- A community member noted that although she didn't want to lose momentum, she was supportive of the plans for further site characterization.
- Ms. Rosetti questioned whether there was enough information to warrant having another community Open House. A community member indicated that there should be a venue to get Mr. Schweizer's comments out to the community.
- Mr. Beveridge thinks that community member support is needed for that sort of thing. Is a letter enough? Maybe we need a community education tool. Mr. Beveridge did not feel that an EPA Open House/poster session was needed.
- Ms. Caraway stated that we could still have an October meeting and try to bring it indoors. The attempt would be to try to bring what's happening to a larger population, in addition to the CAG.
- Ms. Rosetti indicated that there will be a CAG meeting in September. EPA could also assist in setting up an independent CAG meeting without EPA staff present. Additionally, Steve Calanog has set up a field office and trailer and is there during business hours (8-5 M-F). We could also have AMCO materials available there or we could possibly hold the CAG meetings at the field office (room holds 15 to 25 people).
- Mr. Beveridge asked whether EPA has an obligation to hold an Open House?

- Ms. Caraway stated that EPA was not obligated to hold an Open House for the community, but wanted to make sure that we are meeting informational needs of the community. Ms. Rosetti wanted to make sure that we have meetings when they are needed.
- Mr. Beveridge stated that we need some way to get the word out. We, as a CAG, need to think about how we do that. Ms. Rosetti has talked to everyone in the neighborhood on 4 or 5 different occasions. Community interest is still lacking. We haven't really engaged the whole neighborhood or haven't communicated the urgency of the situation to the community.
- A community member did not see the need for an Open House in October.
- Mr. Beveridge suggested that when the CAG discusses the letter, they could discuss new outreach approaches. The National Night Out is in August. The CAG could build some information distribution. Perhaps EPA could sponsor or distribute information during those block parties.
- Ms. Caraway felt that the block parties could be a good way to distribute information.
- Adjourn.

### **Next Meeting**

AMCO Superfund Site CAG Meeting: TBD September 2011 at the Mandela Gateway Apartments Community Room located at 1400 7th Street, Oakland.